



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION
SUPPORTING AMENDMENT NO. 60 TO FACILITY OPERATING LICENSE NO. DPR-65

NORTHEAST NUCLEAR ENERGY COMPANY

MILLSTONE NUCLEAR POWER STATION, UNIT NO. 2

DOCKET NO. 50-336

Introduction

By applications dated June 26 and July 10, 1980, as supplemented by letters of May 13 and August 7, 1980, Northeast Nuclear Energy Company (NNECO or the licensee) requested amendment to Facility Operating License No. DPR-65 for the Millstone Nuclear Power Station, Unit No. 2 (MS-2).

The NNECO applications propose to: (1) add a footnote to Technical Specification (TS) 3.9.4.1.a.1 to authorize up to four (4) electrical penetrations of the containment to be removed concurrently with fuel movement or core alterations; and (2) change TS Table 3.1-1 to renumber the access doors to the spent fuel pool area to agree with the security plan.

Discussion and Evaluation

During the 1978 and 1979 refueling outages, considerable testing of the containment electrical penetrations and movement of some circuits was necessary to assure that all safety related conductors had insulation resistance greater than 100 megohms. Prior to issuance of the Cycle 3 reload amendment, dated May 12, 1979, NNECO agreed to propose a permanent type repair of these penetrations. This agreement was consummated in the letter of May 13, 1980 in which NNECO states its current plans to replace the modules associated with 32 of the 40 electrical penetrations during the 1980 refueling outage.

In the June 26, 1980 application, NNECO proposed that the replacement of the penetration modules be allowed during the time core refueling is proceeding. This would greatly improve the efficiency of the outage, but would require a TS change for the limiting conditions for operations (LCO) on containment penetrations (TS 3.9.4). This TS requires that:

- c. Each penetration providing direct access from the containment atmosphere shall be either:
 1. Closed by an isolation valve, blind flange, or manual valve, or
 2. Be capable of being closed by an OPERABLE automatic containment purge valve.

The above TS requirement is to ensure that the potential radiological consequences of a postulated fuel handling accident inside containment (FHAIC) remain within the bounds of the Safety Evaluation.

8009030058

While the penetration modules are being replaced during core refueling, NNECO proposes to:

- Provide dedicated personnel outside and inside containment to seal any open penetrations in the event of a FHAIC.
- Direct communications will exist at all times between the control room and the electrical penetration workers both inside and outside the containment.
- In the event of a FHAIC, workers inside and outside containment would seal any open electrical penetration upon direction from the control room.
- Electrical penetration module work, resulting in a breach of containment integrity, will be performed on not more than four penetrations at any time. In addition, work resulting in a breach of containment integrity will be performed on no more than two electrical penetrations at any time in each penetration room.

In the event of a fuel handling accident inside containment, personnel located in the electrical penetration areas would be instructed by the control room to isolate the containment. This would be done by installing a neoprene tapered plug immediately following removal of an existing penetration module, according to the NNECO letter of August 7, 1980. They state that this installation can easily be done in five (5) minutes from any starting condition. The analysis of record for the FHAIC (NNECO submittal dated March 21, 1977) assumes that containment isolation requires ten (10) minutes. Our review of the FHAIC was an independent analysis with acceptable results as documented in the Safety Evaluations for Amendment No. 52 (May 12, 1979).

In the August 7, 1980 letter, NNECO states that justification for the acceptability of this change included the following points:

- (1) Previous evaluations performed by both NNECO and the NRC Staff regarding a FHAIC would remain valid.
- (2) Direct communications from the control room to personnel located in the electrical penetrations would be maintained.
- (3) Penetration work resulting in a breach of containment integrity would be performed on no more than four (4) penetrations at any time, with no more than two (2) penetrations in each penetration room.

We find the replacement of containment electrical penetration modules during fuel movement or core alterations acceptable provided the controls, as described by NNECO letters dated June 26 and August 7, 1980, are implemented by approved and tested procedures. We will request the NRC Inspection and Enforcement resident inspector for MS-2 to confirm that Emergency Procedure 2520 has been modified appropriately to provide this control and that satisfactory testing of con-

tainment isolation using such procedures is completed before fuel handling and module replacement are performed concurrently.

In review of the proposed changes to TS Page 3/4 9-4, we find that modifications are necessary to more explicitly define the acceptable LCOs for the core refueling operation. Such modifications have been discussed with and agreed to by the NNECO staff. We find the modified TS changes acceptable.

In the July 10, 1980 application, NNECO proposed changes to TS Table 3.9-1 to renumber the access doors to the spent fuel pool area. In the current security plan, all Millstone Unit No. 1 security doors have numbers in the 100 series and, likewise, the Unit No. 2 doors are in the 200 series. Therefore, a TS change to renumber the security doors is necessary. Since this renumbering is administrative and no physical modifications are being made, we find the TS change for all doors except Nos. 292 and 207 (new numbers) acceptable.

Doors Nos. 292 and 207 are in different walls of the solidification system room. Therefore, closing either door will provide ventilation system control in the spent fuel pool area. We find the proposed change to require only one of these series doors to be closed during fuel movement acceptable.

Environmental Consideration

We have determined that the amendment does not authorize a change in effluent types or total amounts nor an increase in power level and will not result in any significant environmental impact. Having made this determination, we have further concluded that the amendment involves an action which is insignificant from the standpoint of environmental impact and, pursuant to 10 CFR §51.5(d)(4), that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of this amendment.

Conclusion

We have concluded, based on the considerations discussed above, that: (1) because the amendment does not involve a significant increase in the probability or consequences of accidents previously considered and does not involve a significant decrease in a safety margin, the amendment does not involve a significant hazards consideration, (2) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

Dated: August 19, 1980